

REMARKS

Claims 1-20 and 44 remain in this case. Claims 21-43 and 45 were withdrawn from consideration in the Office Action dated June 18, 2003. Claims 1-6 and 14-20 were rejected. Claims 7-13 and 44 were objected to. Claim 1 is cancelled. Claims 2, 4-6 and 15-20 are amended. Claims 7 and 44 are re-presented in independent form. Reconsideration of the remaining claims is respectfully requested in light of the amendments and the arguments presented below.

Claim 2 was rejected under 35 USC 103(a) as being unpatentable over Smesny (US Patent 5,444,637) in view of Akram (US Patent 6,472,240). Claim 2 is amended to include an additional limitation and to be in independent form. Claim 2 as amended includes the feature “the one or more electronics platforms individually comprising at least one integrated circuit.” This clearly distinguishes over the “interface connection 18b” of Akram that was cited in the Office Action. Therefore, because all of the features of claim 2 as amended have not been shown in the prior art, claim 2 is submitted to be allowable.

In addition, no motivation was provided for combining Smesny and Akram. Therefore, no prima facie case of obviousness has been made. “To establish a prima facie case of obviousness... there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” See MPEP section 2143. The two references provide alternative approaches with no apparent suggestion to combine one with the other. The Office Action describes the combination as “one possible alternative for effecting a connection.” However, this is not sufficient motivation. “Fact that references can be combined or modified is not sufficient to establish prima facie obviousness.” See MPEP 2143.01.

No motivation to combine the apparatus of Smesny with the interface connection 18b of Akram appears to be provided in Smesny or Akram. In fact, Smesny appears to teach away from such a combination. Smesny teaches pads for connecting with external circuits. “The external control circuit is coupled to, and can be accessed through, an input probe pad arranged upon the semiconductor substrate.” See column 5, lines 11-13. “Pad 24 is a conductive, substantially planar structure” See column 7, lines 43-44. “Wafer 10 includes numerous circuits formed upon its surface topography according to standard fabrication techniques.” See column 6,

lines 37-39. Thus, Smesny teaches the planar nature of the structures used and so teaches away from adding a surface mounted component such as connector 18 of Akram.

Claim 3 depends from claim 2 and is thus believed to be allowable for the reasons given with respect to claim 2 above. In addition, claim 3 includes the limitation “the signal acquisition circuitry is upon the shelf.” The Office Action cited features 17 and 18b of Figure 1B of Akram as disclosing the claimed features. However, the term “internal electrical connections 17” implies that these are internal to the assembly that they are part of, in this case they appear to be internal to “interface connection 18b.” It is not clear how “internal electrical connections 17” could be internal to “interface connection 18b” and be “upon” “interface connection 18b” at the same time.

The definition of the claim term “upon” given in the Office Action is objected to. The Office Action defined the word “upon” in claim 3 apparently by referring to an extrinsic source such as a dictionary. MPEP 2111.01 states, “The words of a claim must be given their ‘plain meaning’ unless they are defined in the specification.” It is not seen how “internal electrical connections 17” could be “upon” “interface connection 18b” if the term “upon” is given its plain meaning.

Furthermore, even using the interpretation of the word “upon,” given in the Office Action, Akram does not show the claimed features. The Office Action interpreted “upon” to be equivalent to “on” which was defined as “(1) used to indicate position above and supported by or in contact with.” The Office action indicated that the second part of this “first definition” was applicable. This appears to define “upon” as: “used to indicate position above and... in contact with.” It is not seen how the “internal electrical connections 17” are “above and...in contact with” connection 18b.” The “internal electrical connections 17” do not appear to be above 18b. They appear to be internal to 18b as their name suggests.

Claims 4-6 and 14-20 have been amended to depend from claim 2 and are therefore allowable at least for depending from an allowable base claim.

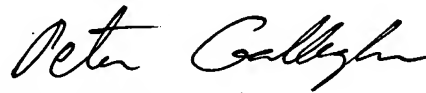
Claims 7-13 and 44 have been rewritten in independent form. Thus, they are submitted to be allowable as indicated by the Office Action in the section entitled “Allowable subject matter.”

New claims 46-54 are added. Claim 46 contains the limitations "the electronics platform including at least one integrated circuit" and "the electronics platform mounted to the substrate by one or more legs that elevate the platform from the substrate." Thus, claim 46 is believed to be allowable for the same reasons as given with respect to claim 2. The new claims are supported throughout the text, for example in paragraph 0045.

Accordingly, it is believed that the present application is now in condition for allowance and an early indication of its allowance is solicited. However, if the Examiner is aware of any further matters that require attention, a telephone call to the undersigned attorney at 415-318-1160 would be appreciated.

Please charge any additional fees required or credit any overpayment to our Deposit Account No. 502664.

Respectfully submitted,



Peter A. Gallagher
Reg. No. 47,584